DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-029911
Date Inspected: 05-Aug-2013

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1730
Location: Job Site

CWI Name: Jesse Cayabyab

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS OBG and Tower

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At Tower Base Electro Slag Welding (ESW) V joint W-043 location Y=6200mm to Y=7000mm, QA randomly ABF welder Mike Jimenez continuing to perform 3G SMAW welding repair on the Ultrasonic Testing (UT) detected reject on the vertical weld of the ESW. The repair excavation is being performed as the per approved Request for Weld Repair (RWR) #201208-040 thru #201208-043. The welder was observed welding in the 3G (vertical) position utilizing Shielded Metal Arc Welding (SMAW) with 5/32" diameter E7018H4R electrode implementing the welding procedure noted as ABF-WPS-D15-1000-R03 Repair. The repair excavation and the adjacent base metal was preheated to more than 350°F using the Miller Proheat 35 Induction Heating System prior/during welding. During the shift, ABF QC Jesse Cayabyab was noted monitoring the workmanship and the welding parameters. Also, Mr. Cayabyab measured the welding parameters and were noted as 180 amperes on a 5/32" diameter E7018H4R electrode. At the end of the shift, 3G repair welding was still continuing and should remain tomorrow.

At Tower Base Electro Slag Weld (ESW) 'Q' weld joint #E-043 face A, ABF personnel was observed continuing to perform excavation on welded ESW at location Y=5770 due to UT detected rejects. The ABF personnel used the carbon air arc gouging followed by die grinder to excavate the defects. This excavation was performed per the approved Request for Weld Repair RWR#201306-002. The ABF QC personnel, Jesse Cayabyab, was noted on site monitoring the welder during the excavation. After the excavation and smooth grinding was completed, the

excavation surface was ground to a smooth and bright surface with the dimensions noted as 130mm long x 42mm wide x 74mm deep. ABF QC Jesse Cayabyab performed the visual testing (VT) and magnetic particle testing (MT) on the excavation and noted no significant defects during the test. This QA also performed the same tests verification and noted same result.

After the completion of QC and QA inspection/verification of the excavation at ESW 'Q' face A Y=5770mm, this QA asked ABF QC Jesse Cayabyab about the approval to weld the excavation. The ABF QC informed this QA that there is a verbal approval and that ABF is proceeding to weld the repair.

At Tower Base Electro Slag Welding (ESW) Q joint E-043 location Y=5770mm, QA randomly ABF welder Donald Plum perform 3G SMAW welding repair on the Ultrasonic Testing (UT) detected defect on the vertical weld of the ESW. The welder was observed welding in the 3G (vertical) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing the welding procedure ABF-WPS-D15-1000-R03. The repair excavation and the adjacent base metal was preheated to more than 350°F using Miller Proheat 35 Induction Heating System prior/during welding. During the shift, ABF QC Jesse Cayabyab was noted monitoring the workmanship and welding parameters of the welder. The measured welding parameter during the welding was recorded at 125 amperes on a 1/8" diameter E7018H4R electrode. At the end of the shift, 3G repair welding was still continuing and should remain tomorrow.

At Tower Base Electro Slag Weld (ESW) 'G' weld joint #S-045 face A, ABF welder Wai Kit Lai was observed continuing to perform excavation on welded ESW at location Y=9400 due to UT detected defects. The ABF personnel used carbon air arc gouging to excavate the defects. This excavation was performed per the approved Request for Weld Repair RWR#201307-005. ABF QC Jesse Cayabyab was noted on site monitoring the welder during the excavation. At the end of the shift, excavation using the carbon air arc gouging was still continuing and should remain tomorrow.

At tower footing top plate, this QA observed Dutra welder Dave Selba #29470565 performing self shielded Flux Core Arc Welding (FCAW-S) with 0.072" diameter E71T-8 wire electrode and implementing Welding Procedure Specification (WPS) Dutra Knife Plate Revision 0. Welding was performed on 1" thick x 12" long triangular shape Knife Plates to Top Plate at southwest corner of the tower designated as RN1C-5 per CCO#289. The welder has fillet welded only two pieces of the knife plate during the shift that should complete the top plate of the tower footing. The completed 16mm fillet weld all around the knife plates deemed acceptable to contract requirements.

WELDING INSPECTION REPORT

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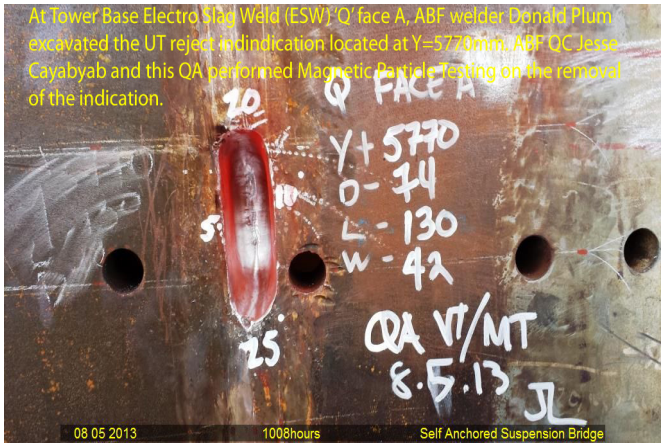

Summary of Conversations:

No significant conversation occurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Gary Thomas 916-764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo,Joselito	Quality Assurance Inspector
Reviewed By:	Reyes,Danny	QA Reviewer